

#### **Trees of Bismarck 2021**

# Searching for "Champion" Trees in Bismarck and Learning the History and Stories of Bismarck's Trees

By Susan Wefald

For a prairie city, with an average rainfall, of less than 18 inches a year, Bismarck has a magnificent urban forest. Most of the trees in the city limits, except for those adjacent to the Missouri River bottoms, have been planted, watered and maintained. The trees add beauty and provide habitat for birds and other wildlife. On hot summer days they provide shade, and along busy boulevards they provide a "calming" effect for traffic. They are a living part of our city.

## What is a "Champion" tree?

A Champion tree is a tree that is the largest of its species. In order to determine if a tree is a champion, you measure its circumference, its height, and the spread of its branches. A champion tree is not necessarily an extremely old tree, but the oldest part of Bismarck has its share of very large trees. There are many old American Elms that measure 11 to 12 feet and more in circumference in our oldest residential areas. And many of these trees are very tall.



This spectacular cottonwood is located at the Bismarck Municipal Ballpark and its trunk measures over 18 feet in circumference.

### When were the first trees planted in Bismarck?

The April 26, 1878 *Bismarck Weekly Tribune* noted that "Henry Dion has planted a fine lot of shade trees on his Thayer Street property. George Glass, O.D. Meyer and Capt. Mentor have followed his example . . ." By April 1886, the *Bismarck Weekly Tribune* was promoting Arbor Day: Let every property owner in Bismarck devote his attention to tree planting on that day...Let citizens generally

turn their attention to the beautifying of their yards by the planting of trees...."

This article also noted that trees were being planted on the Burleigh County Court House property.

Visit the grounds of the Former Governor's Residence, built in 1884, at 320 E. Avenue B to see large American Elms that could date from the 1880's. Also, there is a large American Elm on the 6<sup>th</sup> Street side of the Burleigh County Court House that could have been planted in the 1880's. The cottonwood trees on the Burleigh Court House lawn were probably planted in the 1930's, when the "new" court house was built.



A magnificent American Elm has welcomed visitors for many years at the Former Governor's Mansion.

However, not every tree was "safe" once it was planted. Roving and herded cattle were a nuisance in Bismarck, and loved to eat small trees. In 1909, Bismarck City Council passed an ordinance restricting livestock from roaming the streets.

Visit: Three large American Elm trees that were not destroyed by the roving cattle are located near the corner of Avenue A and First Street, an old residential area of Bismarck.

#### **Boulevards**

In 1908, Bismarck City Engineer T.R. Atkinson made a recommendation to the Bismarck City Council that would beautify the city and save money on streets. He suggested building 56 feet roadways in residential areas, instead of 80 feet roadways. As part of the narrower road ways, he recommended green strips, called boulevards, planted with trees between the sidewalks and the roads. The City Council adopted his recommendations in 1909.

Visit 6th Street between Avenue B and Boulevard. Note how wide the north-south streets are in this area of town, one of the first residential areas of Bismarck. Several existing homes in this neighborhood were built in the 1880's. Also, find the American Elm tree on the boulevard near 6<sup>th</sup> and Avenue F, one of the largest elms in Bismarck.



An American Elm on 6<sup>th</sup> Street is almost ½ the height of the ND Capitol Building.

### Early Tree plantings in Custer Park - 1910

Bismarck's first city park was Custer Park, just west of Washington Street, near downtown. Established in 1910, in May, 1910, the *Bismarck Daily Tribune* announced that "all citizens are invited to plant a tree" in the park. Holes were prepared and trees and water were furnished.

Visit Custer Park to see several large trees that may date from 1910.

# City plants trees along residential streets - 1911

By September, 1911, the City of Bismarck was planting trees, as part of street improvement projects. The *Bismarck Daily Tribune* reported on September 13, 1911, that the city would be undertaking a street improvement project on 4<sup>th</sup> Street between Avenue C and Avenue F. The project included planting and maintaining trees on 4<sup>th</sup> Street from Rosser to Boulevard Avenue. This was an important step which led to the City of Bismarck planting trees on the green boulevards along streets in residential areas for years to come.

Visit: A good place to see a street lined with one of these early city tree plantings is Avenue B between  $5^{th}$  Street and Hannifin. Most of the large American Elm and Green Ash trees on this street were planted between 1912 and 1916.



American Elms create a canopy over Avenue B.

## **Boulevard tree plantings by the city of Bismarck**

1911-1940: Older residential areas between the rail road tracks and Boulevard Avenue: American Elm and Green Ash

1950's: Highland Acres: American Elm, Green Ash, Linden

1940 - 1960's: East and West of the Capitol Building: American Elm, Green Ash, Linden

1970's: Homan Acres: As streets were widened and created, Green Ash and Linden trees were planted along the streets

### **Bur Oak Trees in Bismarck**

Bur Oak, a native tree of North Dakota, usually grows wild in ravines along the Missouri River. Very few Bur Oaks survived during Bismarck's early years (1872-1900) because people cut the oaks for building materials and firewood. However, the city park system has nurtured a few Bur Oaks that are grand old trees.

Visit: Walk through the ravines at Sleepy Hollow Park to see some large Bur Oak trees. Also, there are some large Bur Oaks along River Road in Pioneer Park.



The branches of a Bur Oak at Sleepy Hollow Park provide homes and food for wildlife

#### Bismarck's Largest Trees – the Cottonwoods

Almost every cottonwood tree in the river bottoms near Bismarck was cut down and used for fuel for the steamboats that plied the Missouri River between the 1830's and 1907. Early pictures of Bismarck show the river bottom with no large trees. However, early Bismarck settlers would go down by the river and dig up small cottonwood saplings, and plant them near their homes in Bismarck.<sup>ix</sup> Some of the large cottonwood trees near the Missouri River in Bismarck are probably over 125 years old.

Visit: Take a bike ride or walk on the recreation trail through Sertoma Park and look up at the huge cottonwood trees along the trail. Some are around 100 feet high – half the height of the North Dakota State Capitol Building! Or take a drive through General Sibley Park, on south Washington Street, to see some very impressive cottonwoods.

One of the most famous large cottonwood trees in Bismarck is in the middle of a street.

Visit: To find this cottonwood, drive on Burleigh Avenue, heading west from South Washington Street, about one block.



The grand cottonwood in the middle of Burleigh Avenue.

## **Protecting and Sustaining our Urban Forest for future Generations**

Bismarck has been recognized as a "Tree City USA" for 44 years.

Each year the Bismarck Forestry Division, in cooperation with residents, business owners and various groups, plant between 750 - 1000 trees a year.

The Bismarck Forestry Division inspects trees and monitors for insects and diseases that can harm our urban forest. The Bismarck Forestry Department removes hundreds of trees annually in an attempt to prevent the spread of insect and disease throughout the City's urban forest.

#### **Benefits of Urban Forests**

The Arbor Day Foundation cites the following advantages of urban forests:

- Trees help absorb the sounds of traffic in urban areas by 40%
- Neighborhoods with trees are seven to nine degrees cooler than those without.
- Trees reduce energy costs up to 25% by shading buildings and protecting them from winter winds.
- Homes with trees have higher property values
- Green space plays a major role in improving mental and physical health.
- Planting and maintaining trees absorb carbon dioxide in the atmosphere, mitigating the effects of climate change.<sup>x</sup>



This large Linden tree provides welcome shade on hot days.

## **Champion Trees of Bismarck**

Some of Bismarck's largest trees are not the oldest trees in town. Just as some people grow tall and others are short, the DNA in a tree and resource availability determines its size. Therefore, some of

the largest American Elms, Green Ash and Linden can be found in neighborhoods built in the 1950's. These trees are about 70 years old.

In order to determine if a tree is a champion, measurements are taken of the circumference (at 4.5 feet), the height of the tree, and the spread of the branches (the average crown). Susan Wefald and Nancy Willis, volunteers with the Bismarck Forestry Department, measured many large trees in Bismarck in 2021.

The trees in this "champion" survey are species that are native to North Dakota: American Elm, Green Ash, Linden, Bur Oak and Cottonwood. This list was compiled in October 2021 and includes some of the largest trees of their species in Bismarck city limits and in parks administered by Bismarck Parks and Recreation District. There are more "champions" waiting to be found in Bismarck. Contact the City Forestry Department, Bismarck, if you want to recommend a large tree.



One of Bismarck's "champion" trees is a Green Ash on Laforest Ave.

## American Elm

- 112 Arikara, Backyard (view from sidewalk). Circumference: 17.5 feet, Height 85 feet, Average Crown 94 feet.
- 1308 N. 15<sup>th</sup> Street. Circumference 15.7 feet, Height 87 feet, Average Crown 78 feet.
- 927 N. 6<sup>th</sup> Street. Circumference 13.4 feet, Height 106 feet, Average Crown 90 feet.
- 1112 N. 4<sup>th</sup> Street. Circumference 14.8 feet, Height 88 feet, Average Crown 70 feet.
- 320 E. Avenue B (tree closest to 4<sup>th</sup> Street on Avenue B) Circumference 12.1 feet, height 107 feet, Average Crown 91.

## Cottonwood

- Bismarck Municipal Ballpark, N of entrance. Circumference 18'10", Height 105 feet, Average Crown 89 feet.
- 415 Southwood Avenue (Backyard view from street). Circumference 18.4 feet, Height 110 feet, Average Crown 77 feet.
- General Sibley Park & Campground, N of Campsite 75B. Circumference 16.5 feet, Height 97 feet, Average Crown 87 feet.
- Middle of Burleigh Ave, West of S. Washington. Circumference 16.4 feet, Height 98.3 feet, Average Crown 80 feet.
- Sertoma Park, adjacent to trail west of tennis courts. Circumference 16.1, Height 90 feet, Average Crown 67 feet.

#### Green Ash

- 1910 Laforest. Circumference 13 feet, Height 83 feet, Average Crown 71 feet.
- 2005 St. Joseph Drive (view from sidewalk). Circumference 11.8 feet, Height 70 feet, Average Crown 60 feet.
- 348 Telstar (view from sidewalk). Circumference 9.6 feet, Height 75 feet, Average Crown 67 feet.
- 1120 N. Mandan Street (backyard view from sidewalk). Circumference 9.7 feet, Height 70 feet, Average Crown 51 feet.
- 1017 N. Anderson. Circumference 9.7 feet, Height 65 feet, Average Crown 58 feet.

## <u>Bur Oak</u>

- Ducks Unlimited, west of building. Circumference 6.7 feet, Height 70 feet, Average Crown 54 feet.
- Pioneer Park, south end of park access road, near River Road. Circumference 7.6 feet, Height 58 feet, Average Crown 52 feet.
- Sleepy Hollow Park, west of food hut in woody draw. Circumference 7.4 feet, Height 59 feet, Average Crown 53 feet.

- Sleepy Hollow Park, west end of western woody draw. Circumference 7.4 feet, Height 55 feet, Average Crown 50 feet.
- Pioneer Park, E of shelter, near River Road. Circumference 7.1 feet, Height 50 feet, Average Crown 39 feet.

### <u>Linden</u>

- 1162 N. 4<sup>th</sup> Street (view from sidewalk). Circumference 12.2 feet, Height 75 feet, Average Crown 56 feet.
- 919 N. 3<sup>rd</sup> Street (south tree). Circumference 10.4 feet, Height 71 feet, Average Crown 43 feet.
- 1223 E Highland Acres Road (backyard view from sidewalk). Circumference 10 feet, Height 71 Feet, Average Crown 56 feet.
- 718 N. First Street (view from sidewalk). Circumference 10.5 feet, Height 56 feet, Average Crown 55 feet.
- 1129 N Parkview (view from street). Circumference 9.6 feet, Height 68 feet, Average Crown 41 feet.

i"Henry Dion," Bismarck Weekly Tribune, April 26, 1878, 4.

<sup>&</sup>quot; "Next Saturday, April 24, Arbor Day," Bismarck Weekly Tribune, April 23, 1886, 4.

<sup>&</sup>quot;A Good Meeting," April 15, 1887, 8. "It is a very poor inducement to beautify our city by planting trees and shrubbery only to have them furnish browse for roving bovines."

<sup>&</sup>quot;Commissioners Talk of Buying More Land – Famous Cow Ordinance has its Last Reading and is Now Law," *Bismarck Daily Tribune*, July 27, 1909, 5.

<sup>&</sup>lt;sup>v</sup> "Boulevarding," Bismarck Daily Tribune, February 6, 1908, 4.

vi "\$200,000 Improvements in the City of Bismarck During the Past 12 Months – More Coming," *Bismarck Daily Tribune,* September 15, 1909, 5.

vii "To Plant Trees," Bismarck Daily Tribune, May 1, 1910, 5.

viii "Resolution," Bismarck Daily Tribune, September 13, 1911, 4.

ix "Letter to Editor from Ed Sloan, Sept. 28, 1886," Bismarck Weekly Tribune, October 1, 1886, 6.

<sup>&</sup>lt;sup>x</sup> Arbor Day Foundation, Tree City USA. See <a href="https://www.arborday.org/programs/treeCityUSA/index.cfm">www.arborday.org/programs/treeCityUSA/index.cfm</a> Accessed November 12, 2021.